REMARKS

Claims 1–12 are pending in this application, claims 13–16 having been withdrawn in response to a restriction requirement.

Restriction Requirement

Under 35 U.S.C. § 121, the Examiner has required that Applicants elect to restrict prosecution to one of the following two group:

I.   "Claims 1-12, drawn to generating a data structure, classified in Class 707, Subclass 100;" and

II.   "Claims 13-16, drawn to Presentation processing of documents classified in class 434, subclass 322."

During a telephone conversation with the Examiner on October 6, 2008, Applicants' attorney elected without traverse to prosecute the invention of Group I, Claims 1–12. Applicants hereby confirm that election. Accordingly, Claims 13–16 are withdrawn.

Objections to the Specification and Abstract

The Examiner objected to the Specification because it contained embedded hyperlinks and improperly formatted trademarks. The Examiner also objected to the Abstract because it was not compliant with U.S. format. Applicants have amended the Specification and Abstract in accordance with the Examiner's suggestions. Applicants therefore request that the objections be withdrawn.

Claim Rejections under 35 U.S.C. § 103

The Examiner rejected Claims 1–5 and 7–11 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,463,440 ("Hind") in view of U.S. Patent Application Publication No. 2002/0016801 ("Reiley") in further view of U.S. Patent No. 6,578,192

("Boehme"). Claims 6 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hind in view of Reiley in further view of Boehme in further view of U.S. Patent Application Publication No. 2003/0120686 ("Kim").

Hind discloses a system for dynamically selecting one or more style sheets to transform data to be displayed on various devices. Reiley discloses a system for transforming the content of a website so that it may be easily displayed on a mobile device. Boehme discloses a system for encoding script components in a document and parsing the document to find and execute the script components.

The Examiner claims that Hind discloses "a display medium having a plurality of display lines for rendering multimedia content data thereon," "a processor associated with said display medium," the processor receiving multimedia content data comprising textual, MathML, and external file indicia data, the processor parsing the multimedia content data to derive textual, MathML, and external file indicia data, and creating objects based on the data type of nodes and locating a display line to display the objects on.

The Examiner concedes that Hind does not disclose categorizing the textual, MathML, and file data according to a data type, storing the derived and categorized textual, MathML, and external file indicia data as a tree, defining a traverse procedure that includes visiting a node of the tree, determining the data type of the node, and displaying the node in accordance with the data type, and applying the traverse procedure to the left subtree of the visited node, the right subtree of the visited node, and the root node such that the rode node is visited first.

Confusingly, the Examiner both claims that Hind discloses and concedes that Hind does not disclose "if the data type is TEXT: create a text object having said textual node data and locate a display line to display said text object in accordance with predetermined formatting

conventions, if the data type is FILE: create a file object having said external file indicia node data and locate a display line to load and display said file object in-line with previously rendered text and in accordance with predetermined formatting conventions, if the data type is MathML, create a MathML data object having said stored MathML node data and locate a display line to display said MathML data object in-line with previously rendered text and in accordance with predetermined formatting conventions." Applicants request clarification of the Examiner's contentions regarding these elements.

The Examiner claims that Reiley discloses categorizing the textual, MathML, and file data according to a data type, storing the derived and categorized textual, MathML, and external file indicia data as a tree, and displaying the node data in accordance with the data type by creating objects based on the data type and locating display lines to load the objects to.

The Examiner concedes that neither Hind nor Reiley disclose defining a traverse procedure that includes visiting a node of the tree, determining the data type of the node, and displaying the node in accordance with the data type, and applying the traverse procedure to the left subtree of the visited node, the right subtree of the visited node, and the root node such that the rode node is visited first. The Examiner asserts that these elements are disclosed by Boehme.

Applicants hereby traverse the rejections of Claims 1–12 under 35 U.S.C. § 103(a).

The references cited by the Examiner do not disclose "displaying said node data in accordance with said data type, wherein: if the data type is TEXT: create a text object having said textual node data and locate a display line to display said text object in accordance with predetermined formatting conventions, if the data type is FILE: create a file object having said external file indicia node data and locate a display line to load and display said file object in-line with previously rendered text and in accordance with predetermined formatting conventions, if

the data type is MathML, create a MathML data object having said stored MathML node data and locate a display line to display said MathML data object in-line with previously rendered text and in accordance with predetermined formatting conventions," as required by independent Claims 1 and 7, from which all of the pending claims depend.

These claim limitations require displaying node data in accordance with data type wherein text, file, and MathML objects are created and display lines are located to display each object in-line with previously rendered text. The Examiner contends that these limitations are disclosed by Reiley at page 2, ¶ 16. Reiley, however, only discloses creating a hierarchical arrangement of nodes corresponding to elements on a web page. It does not disclose locating display lines in-line with previously rendered text nor actually displaying the node data, as required by Claims 1 and 7. Additionally, Hind also does not disclose creating objects based on data types and locating display lines for each of the objects. One skilled in the art would understand that Hind deals only with using a style sheet to produce an "output document" that can be used by various devices.

The references cited by the Examiner also do not disclose the traverse procedure claimed in Claims 1 and 7. This traverse procedure is recited in the independent claims as including "visiting a node of said tree, determining the data type of said node, [and] displaying said node data in accordance with said data type." The traverse procedure is executed by "applying said traverse procedure upon the left subtree of said visited node; applying said traverse procedure upon the right subtree of said visited node; and applying said traverse procedure upon said root node such that said root node is the first visited node." The Examiner contends that these limitations are disclosed by Boehme at Col. 5, ll.37-44. Boehme, however, does not disclose,

inter alia, determining the data type of each node. Rather, Boehme is focused on "searching for <BSP> elements."

One skilled in the art would understand that <BSP> elements are not data types. Instead, they are sections of a document that contain executable code. Further, it is only the <BSP> elements that Boehme discloses as being processed. Boehme does not disclose processing nodes of each data type, text, file and MathML, by creating a data objects based on the file type. Applicants therefore respectfully submit that all of the elements of Claims 1 and 7 are not disclosed by the prior art and that Claims 1 and 7, along with each of the claims that depend therefrom, at least by virtue of their dependency and in view of these remarks, are patentable over Hind, Reiley, and Boehme. Applicants therefore respectfully submit that all of the elements of Claims 1 and 7 are not disclosed by the prior art and that Claims 1 and 7, along with each of the claims that depend therefrom, at least by virtue of their dependency and in view of these remarks, are patentable over Hind, Reiley, and Boehme.

Furthermore, the Examiner rejected Claims 2 and 8 as substantially similar to Claims 1 and 7 "for the similar reasons." Claims 2 and 8, however, contain significant elements that Claims 1 and 7 do not. Briefly, Claims 1 and 7 deal with categorizing and parsing data as textual, MathML, and file data and performing a traverse procedure on the data based on the categorization. Claims 2 and 8 claim further categorizing the MathML elements as MathML Composite and MathML Terminal data types and performing a second traverse procedure on the MathML elements based on the further categorization.

None of the references cited by the Examiner, however, disclose a second traverse procedure and the Examiner has not explained how these additional elements are disclosed in the prior art. Significantly, Boehme, which the Examiner relies upon as disclosing the traverse

procedure of Claims 1 and 7 describes only a single traverse which searches for <BSP> elements (col. 6, ll. 37-44). It does not disclose further categorizing an element and performing a second traverse procedure based on that categorization. Applicants therefore respectfully submit that all of the elements of Claims 2 and 8 are not disclosed by the prior art and that Claims 2 and 8, along with each of the claims that depend therefrom, at least by virtue of their dependency and in view of these remarks, are patentable over Hind, Reiley, and Boehme.

CONCLUSION

In light of the foregoing, Applicants respectfully submit that all rejections have been overcome and that the pending claims are in condition for allowance.

A Petition for Extension of Time of One Month accompanies this Response. Applicants have authorized the fees due on the accompanying Fee Transmittal. In the event that any additional fees are due, the Commissioner is hereby authorized to charge any such fees to Deposit Account No. 06-0923. The Commissioner is likewise authorized to credit any overpayment to Deposit Account No. 06-0923.

If the Examiner believes that a telephone conversation with Applicants' attorney would expedite allowance of this application, the Examiner is cordially invited to telephone the undersigned attorney at the number provided below.

Respectfully submitted,

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